



Infant with Multifocal Osteomyelitis

Nik Abdul Adel, Nik Alyani; Abdul Razak, Ardilla Hanim;
Awang, Mohd Shukrimi

Department of Orthopaedic, Kulliyah of Medicine, Kuantan

INTRODUCTION

Multifocal osteomyelitis is rare but a potential cause morbidity and mortality^{2,3}. Risk is higher in infants and older children with infective risk factors^{2,3}. Incidence reported 20-50% in all neonates with osteomyelitis^{1,3}

CASE REPORT

3-month-old boy, born premature at 35 weeks, had reduced left upper limb movement for 1 week without any history of trauma. 2 weeks prior, he had vaccination to right thigh and fever secondary to tonsillitis where he was prescribed with amoxicillin. Examination revealed reduced motion of the left shoulder with swelling and erythema. Radiograph showed callus over clavicular fracture and subsequent ultrasound showed subcutaneous edema. All infective parameters were raised. Initial diagnosis were cellulitis with healing clavicle fracture and parenteral cloxacillin was started.



Figure 1: left clavicle radiograph at initial (left) and 1 week later (right)

His clinical condition was not improving despite 7 days of antibiotics and repeated radiographs showed lytic lesion with extensive periosteal reaction, hence raised the suspicious of osteomyelitis. It was later confirmed with MRI. The MRI revealed osteomyelitic foci at left clavicle and scapula, T1 to T7 ribs and left humeral head. Parenteral ceftazidime was added. He responded well with improved clinical condition and blood parameters. At 3 weeks of admission, he was noted to have reduced motion and swelling over right forearm. Radiographs of the right radius and ulna showed similar changes as left clavicle.



Figure 2:
Radiograph of
right radius
ulna

Radionuclide imaging detected high uptake at bilateral radius and ulna, left clavicle and left ankle. Due to multiple bones involvement, syrup rifampicin was added for 2 weeks. Patients responded well to the antibiotics regime clinically and biochemically and was discharged well. Review at 6 weeks from the first diagnosis, he was active and well.

DISCUSSION

Option of whole body MRI^{1,2} or radionuclide imaging³ are suggested for suspected cases. Antibiotics should cover for staphylococcus, gram negative and positive^{1,2} organisms. Short duration of rifampicin may be considered in case of unresponsiveness¹

CONCLUSION

Treating personnel should have a high index of suspicious in detecting patient with possible multifocal osteomyelitis as late treatment may caused morbidity to patients. Long duration of follow up is needed to detect early complication.

REFERENCES

1. Somford MP, et al., J Orthop Res Physiother 2015,1:015
2. Papan C et al, Klin Padiatr 2020
3. Howman Giles et al, Clinical Nuclear Medicine, Apr 1992



Welcome to 51st MOA ASM Conference. For the upcoming sessions, please join Lecture Hall A for LLRS session, Hall B for Humanitarian session. Stay tuned!

E-Poster Presentation



00:50 02:25

Infant with Multifocal Osteomyelitis

Nik Ahdal Adil, Nik Alyani Abdul Karim, Ard Eo Tharin, Amang, Mohd Shukriani
Department of Orthopaedic, Kuala-Yah of Medicine, Sumatera

INTRODUCTION
Multifocal osteomyelitis is rare but a potential cause morbidity and disability^{1,2}. Risk is higher in infants and older children with infective risk factors³. Evidence showed 20-50% in all associates with osteomyelitis⁴.

CASE REPORT
A 7-month-old boy, born premature at 35 weeks, had reduced left upper limb movement for 1 week without any history of trauma. 2 weeks prior, he had pneumonia with right iliac and lower secondary to osteitis where he was prescribed with amoxicillin. Examination revealed redness, motion of the left clavicle with swelling and erythema. Radiograph showed an ill-defined osteolytic fracture site subsequent osteosclerosis showed subcutaneous edema. All laboratory parameters were normal. Initial diagnosis was osteitis with healing clavicle fracture and parenteral cloxacillin was started.

DISCUSSION
Options of wide deep MRI or radiologic imaging⁵ are suggested for suspected cases. Antibiotics should cover for staphylococcus, gram negative and positive³ organisms. Short duration of rifampicin may be considered in case of immunodeficiency⁶.

CONCLUSION
Treating personnel should have a high index of suspicion in detecting parenteral infection possible multifocal osteomyelitis as late treatment may caused morbidity to patients. Long duration of follow up is needed to detect early complications.

REFERENCES

1. Sankar JH. et al. J Child Orthop Euro. 2018;12(1):11
2. Pappas C et al. Clin Orthop 2020
3. Horowitz G et al. J Child Orthop. 1997

Figure 1: Left clavicle radiograph at initial (left) and 1 week later (right)

Figure 2: Radiograph of right clavicle after 1 week

Abstract: INFANT WITH MULTIFOCAL OSTEOMYELITIS
Nik Alyani Nik Abdul Adel

Ask Presenter Questions
Email Presenter

Rate this Abstract

Certificate

OF PRESENTATION

THIS CERTIFICATE IS PROUDLY PRESENTED TO

Nik Alyani Nik Abdul Adel

INFANT WITH MULTIFOCAL OSTEOMYELITIS

**51st Malaysian Orthopaedic Association
Annual Scientific Meeting / Annual General Meeting 2022**

9th to 11th June 2022



Dr Suhail Suresh Abdullah
President
Malaysian Orthopaedic Association
2021-2022



Prof Dr Tunku Kamarul Zaman
Tunku Zainol Abidin
Organising Chairperson
51st Malaysian Orthopaedic Association
Annual Scientific Meeting 2022



Assoc Prof Dr Azura Mansor
Scientific Chairperson
51st Malaysian Orthopaedic Association
Annual Scientific Meeting 2022